

**Before The  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

<b>In the Matter of</b>	}	
	}	
<b>Unlicensed Operation in the Television</b>	}	<b>ET Docket No. 04-186</b>
<b>Broadcast Bands</b>	}	
	}	
<b>Additional Spectrum for Unlicensed</b>	}	<b>ET Docket No. 02-380</b>
<b>Devices Below 900 MHz and</b>	}	
<b>in the 3 GHz Band</b>	}	

**TO: Office of the Secretary  
The Commission**

**REPLY COMMENTS OF  
PAPPAS TELECASTING COMPANIES**

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## **Summary**

Pappas Telecasting Companies ("Pappas") hereby submits its Reply Comments in response to the comments filed by parties regarding the Commission's proposed introduction of new, unlicensed devices in the television band.

Pappas filed Comments in this proceeding, making three main arguments. First, Pappas argued that the introduction of unlicensed wireless devices into the television service band at this time will likely have a significant adverse impact on the DTV transition. Second, Pappas argued that the Commission, and proponents of the proposed rules, rely upon untested technology that bears the potential for causing harmful interference to over-the-air reception of television signals for millions of consumers. Finally, Pappas argued that the Commission failed to demonstrate that there is an overriding justification to introduce unlicensed devices into the television spectrum given all these risks -- since there are several other bands that have been set aside for unlicensed use.

Nothing filed by other parties in this proceeding effectively rebuts any of Pappas' arguments. In fact, a large cross-section of the telecommunications industry, from broadcasters, to manufacturers of licensed wireless devices, to engineering consultants, to the leading trade organizations, all concur that the Commission's proposed rules are unjustified, and would likely lead to disastrous consequences for over-the-air viewers at this time. Those comments filed in support of the proposed rules lacked the real-world analysis of the impact of unlicensed devices on the licensed-use of the spectrum. Moreover, several parties advance novel constructs in a vain effort to justify the evisceration of the interference protections granted to broadcasters under the Commission's rules. Yet none provide any sustainable justification for such a sweeping departure from the Commission's rules.

In light of these considerations, Pappas urges the Commission to postpone opening the floodgates for these unlicensed devices until after the transition to digital television service has been completed, and only after the proponents of such devices have borne their burden of demonstrating that these devices will not cause interference to the over-the-air reception of television services.

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**REPLY COMMENTS OF  
PAPPAS TELECASTING COMPANIES**

Pappas Telecasting Companies, by and through its attorneys, hereby submits these Reply Comments in response to the comments filed in the above-referenced rulemaking proceedings relating to the proposed authorization of unlicensed devices in the television broadcast bands. Pappas' Comments were submitted on November 30, 2004 ("Pappas Comments"), in response to the issuance of the Notice of Proposed Rulemaking, released on May 25, 2004.<sup>1</sup>

Pappas has conducted a thorough review of the comments supporting the rules proposed in the NPRM, and finds that nothing submitted in this proceeding justifies the unprecedented and potentially catastrophic introduction of unlicensed fixed and mobile wireless devices in the TV Band.<sup>2</sup> Several of the parties submitting comments supporting the proposed new rules cited the advantageous propagation characteristics of the spectrum to which the TV

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<sup>1</sup> 19 FCC Rcd 10,018 (2004) ("NPRM"). The Comment and Reply Comment deadlines were subsequently extended. *Order Granting Extension of Time*, Public Notice, 19 FCC Rcd 20,441 (2004).

<sup>2</sup> The Commission is proposing to permit unlicensed operations on television channels 5-36 and 38-51 (the "TV Band"). See *NPRM*, ¶ 33.

Band is assigned, and, not surprisingly, emphasized the great demand for this spectrum for wireless broadband services.<sup>3</sup>

However, noticeably absent from these comments was any substantive real-world analysis of the impact of unlicensed devices on the American consumer's reception of analog and digital television service. While some parties postulated novel justifications for the potentially devastating interference to television service that may be caused by these unlicensed devices,<sup>4</sup> no party demonstrated convincingly, let alone conclusively, that these unlicensed devices will not cause harmful interference to the reception of television service for hundreds of millions of American viewers. Moreover, no party provided a compelling justification for the introduction of these unlicensed devices in the middle of the DTV transition given the very real risk they pose to television services.

On the other hand, convincing evidence was submitted by equipment manufacturers, engineering consultants and broadcasters to demonstrate that the Commission's proposed rules, and similar proposals submitted by other parties, could not ensure that reception of television service by the American public would not be degraded. The fact remains that the current status of the development of technology simply does not permit the real-world testing of the interference potential of unlicensed devices at this time, particularly when we are still in the midst of the DTV transition.

In light of the Commission's unwillingness thus far to grant must-carry rights for digital television stations, television licensees may well have to rely on the over-the-air delivery of their digital television signals, and in any event, millions of viewers still rely on over-the-air reception.

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<sup>3</sup> See *Pappas Comments*, pg. 14.

<sup>4</sup> See *e.g.*, Comments of New American Foundation, *et. al.*, dated Nov. 30, 2004 (proposing the co-equal status of unlicensed devices and licensed secondary television licensed services).

Clearly, the premature adoption of the proposed rules, prior to the full-scale rollout of the digital service, and without the real-world testing of the unlicensed devices that would be permitted once the DTV transition is completed, is contrary to established Commission precedent and would not serve the public interest.

## **BACKGROUND**

In its initial Comments, Pappas made three principal arguments against the adoption of rules proposing to permit unlicensed devices to operate within the TV Band. Pappas noted that the underlying separation and interference protection requirements included in the DTV rules were adopted many years ago, and it is not clear whether these rules will be effective (in their current form) once all DTV stations commence full-power operations in 2006.<sup>5</sup> Pappas also argued that unlicensed devices must protect the existing reception characteristics of all television signals, and that any interference to the reception of television signals must be considered “harmful” under the Commission’s rules.<sup>6</sup> For these reasons, Pappas argued that any consideration of the proposed rules should be delayed until the conclusion of the DTV transition.

In addition, Pappas noted that the proposed operation of the unlicensed devices in the TV Band is yet untested, and that the underlying supporters of the proposed interference avoidance mechanisms actually acknowledged that more testing was required prior to the full-scale implementation of the devices.<sup>7</sup>

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<sup>5</sup> Pappas Comments, pg. 7. See *Second Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television*, Report and Order, 19 FCC Rcd 18,279, ¶13 (2004) (“DTV R&O”) (requiring that all commercial and noncommercial television licensees build-out their digital facilities by July 1, 2006).

<sup>6</sup> *Id.*, pg. 8.

<sup>7</sup> *Id.*, pg. 10.

Finally, Pappas argued that the Commission and supporters of the proposed rules have failed to provide a pressing justification for the adoption of the proposed rules in light of more than 900 MHz worth of additional spectrum in other bands for unlicensed use. While Pappas acknowledges that the TV Band is premium spectrum due to its propagation characteristics, Pappas argued that no party, including the Commission, has demonstrated that the TV Band is the “spectrum of last-resort” for unlicensed use at this time.<sup>8</sup> There are, in fact, many other viable portions of the spectrum that have yet to fully-utilized.<sup>9</sup>

In light of the ongoing nature of the DTV transition, where television licensees have yet to make their final DTV channel elections, Pappas argued that prudence requires that the Commission delay consideration of the proposed rules until all the dust has settled on the DTV transition and until conclusive testing of the interference potential of such devices has been preformed and evaluated.

Many other commenters agreed with Pappas’ assessment of the proposed rules. Not only did all other broadcasters filing comments in this proceeding object to the proposed rules, but operators of land mobile facilities, wireless microphone manufacturers, broadcast and wireless equipment manufacturers and wireless licensees also raised serious concerns about the proposed rules.

First, several broadcasters, broadcast associations, and broadcast consultants also filed comments in opposition to the adoption of the proposed rules.<sup>10</sup> Cox concludes that the introduction of unlicensed devices during the DTV transition “will likely harm viewers, broadcasters, unlicensed device manufacturers, unlicensed operators and prospective

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<sup>8</sup> *Id.*, pg. 14-15.

<sup>9</sup> *Id.*, pg. 15.

<sup>10</sup> *See Comments of Entravision Holdings, LLC*, pg. 7 (filed Nov. 30, 2004); *See Comments of Cox Broadcasting, Inc.*, pg. 4 (filed Nov. 30, 2004); *Comments of Red River Broadcasting Company, LLC*, pg. 1 (filed Nov. 9, 2004).



unlicensed device users.”<sup>11</sup> In objecting to the Commission’s rules, Entravision pointed out that unlicensed devices will likely increase the occurrences of the DTV receivers failing to deliver a usable picture to consumers, i.e., the “Cliff Effect.”<sup>12</sup> In light of the issues relating to the sensitivity of DTV receivers, Entravision encouraged the Commission to delay consideration of the new rules to permit more testing.<sup>13</sup>

In addition, the Community Broadcasters Association and the National Translator Association both filed comments urging the Commission to require protection of incumbent licensees for their entire useful reception service, rather the predicted contours established under the Commission’s rules.<sup>14</sup> This position was also supported by the broadcast engineering consulting firm of Cohen, Dippell and Everist, P.C., which suggested that the Commission consider how unlicensed devices may impact the reception of television signals outside the predicated coverage service area, and, if necessary utilize a modified OET Bulletin 72 model.<sup>15</sup> The Society of Broadcast Engineers, Inc., concurred with these arguments, and also noted that existing high power Part 15 devices are already causing interference to broadcast auxiliary stations operating in the 2.4 GHz band, and the Commission has yet to address this issue.<sup>16</sup> Finally, the Association for Maximum Service Television, Inc. (“MSTV”), and the National Association of Broadcasters (“NAB”) filed joint comments, and a supporting engineering study, which requested that the Commission “revisit both the timing and substance” of its proposed

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<sup>11</sup> *Comments of Cox Broadcasting, Inc.*, at pg. 4.

<sup>12</sup> *Comments of Entravision Holdings, LLC*, at pg. 8.

<sup>13</sup> *Id.*, at pg. 7.

<sup>14</sup> *Comments of National Translator Association*, Engineering Statement, pg. 1 (filed Nov. 30, 2004); *Comments of Community Broadcasters Association*, pg. 2 (filed Nov. 30, 2004).

<sup>15</sup> *Comments of Cohen, Dippell & Everist, P.C.*, pg. 4 (filed Nov. 30, 2004).

<sup>16</sup> *Comments of The Society of Broadcast Engineers, Inc.*, pg. 7 filed Nov. 30, 2004).

rules.<sup>17</sup> They agreed with the arguments presented by other parties in this proceeding that the pace of the DTV transition would be greatly affected, and that the Commission has not adequately supported its proposals with demonstrable facts that interference would not be caused to licensed operators in the TV Band. They also argued, quite convincingly, that the NPRM itself violated the Administrative Procedures Act by failing to provide sufficient substance to “frame the subjects for discussion.”<sup>18</sup>

In addition, other licensed operators on the TV Band objected to the proposed rules. For example, many of the wireless microphone manufacturers rejected the Commission’s purported protection of these devices by unlicensed devices. Wireless microphones are specifically authorized for operation in TV Band under Part 74 of the Commission’s Rules. Shure Incorporated disputed the protection of wireless microphone systems because the Commission assumed that wireless microphones operate at the maximum authorized power of 250 mW of power,<sup>19</sup> whereas most operate at only 10-50 mW.<sup>20</sup> ATK Audiotek agreed with Shure, and concluded that the Commission’s assumptions regarding the current operating power of wireless microphones do not “represent reality.”<sup>21</sup> Instead, ATK notes that “most mass manufactured ‘wireless microphones’ UHF equipment transmits only [at] 30-100mW” which would suffer increased interference from unlicensed devices. *Id.*, at pg. 4.

Moreover, incumbent public safety and land mobile licensees also objected to the Commission’s proposed rules. The Association of Public-Safety Communications Officials-

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<sup>17</sup> *Comments of MSTV and NAB*, pg. ii (filed Nov. 30, 2004).

<sup>18</sup> *Id.*, at pg. 28 (citing *Connecticut Light and Power Co. v. Nuclear Regulatory Comm’n*, 673 F.2d 525, 533 (D.C. Cir. 1982)).

<sup>19</sup> *NPRM*, ¶ 38 (concluding that “operation at the power levels permitted in the rules results in a significant signal level at the wireless microphone receiver.”).

<sup>20</sup> *Comments of Shure Incorporated*, pg. 8 (filed Nov. 30, 2004).

<sup>21</sup> *Comments of ATK Audiotek*, pg. 3 (filed Nov. 30, 2004).

International, Inc. ("APCO"), the nation's largest public safety communications organization, filed comments urging the Commission to not adopt its proposed rules<sup>22</sup> permitting unlicensed devices on Channel 14-20 in non-metropolitan areas.<sup>23</sup> APCO concluded that the "Commission's proposed restrictions are insufficient, and could lead to destructive interference to essential public safety radio communications." *Id.* The County of Los Angeles also objected to the proposed rules, noting that the "proposed unlicensed operations will be of a personal/portable nature and could be easily transported to areas in which the subject frequencies are used for public safety."<sup>24</sup>

Not only did current licensees of the TV Band (broadcasters and wireless operators alike) object to the proposed rules, equipment manufacturers and commercial wireless entities also filed objections. For example, QUALCOMM Incorporated, which manufactures wireless equipment, and holds nationwide licenses in the Lower 700 MHz spectrum, urged the Commission not to authorize unlicensed devices. Instead, it argued that the authorization of unlicensed devices would delay the DTV transition, which would prevent QUALCOMM from making full use of the spectrum it obtained through auction, and should make "a definitive showing of non-interference" before permitting unlicensed use of the TV Band.<sup>25</sup> Moreover, QUALCOMM stated that the Commission should wait until the end of the DTV transition to consider the adoption of unlicensed use of the TV spectrum "because the presence of unlicensed devices will complicate the channel selection process, thereby delaying the date on which DTV facilities are operational on selected channels."<sup>26</sup> Finally, QUALCOMM noted that the

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<sup>22</sup> *NPRM*, ¶ 35.

<sup>23</sup> *Comments of APCO*, pg. 2 (filed Nov. 29, 2004).

<sup>24</sup> *Comments of The County of Los Angeles*, pg. 2 (filed Nov. 29, 2004).

<sup>25</sup> *Comments of QUALCOMM, Incorporated*, pg. 7 (filed Nov. 30, 2004).

<sup>26</sup> *Id.*, pg. 8.

underlying theories for mitigating interference “have not been tested, much less proven to work.”<sup>27</sup> Another equipment manufacturer, Harris Corporation, concurred with several of the conclusions made by QUALCOMM, especially waiting until the conclusion of the DTV transition prior to authorizing unlicensed devices in the TV Band.<sup>28</sup>

Other non-broadcast incumbents of the television spectrum also objected the proposed rules. For example, the National Academy of Sciences, requested that the Commission extend its protection of radio astronomy observatories by also prohibiting unlicensed devices on Channels 14, 36, and 38.<sup>29</sup> The National Cable & Telecommunications Association also expressed concern regarding the proposed rules, stating that unlicensed devices will increase “the likelihood that there will be interference with a local broadcast signal received from outside the Grade B contour” that would affect the carriage of broadcast stations entitled to must-carry rights.<sup>30</sup> Instead, NCTA argued that “[c]able headends should be able to reliably receive broadcast signals, regardless of whether the signal is inside or outside the Grade B contour.”<sup>31</sup>

Finally, the Consumer Electronic Association, the very industry trade association that represents many of the industries that would benefit from the proposed rules, filed comments indicating that the proposed rules could cause widespread interference to television licensees,<sup>32</sup> and urged the Commission to conduct testing to demonstrate that unlicensed devices can be

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<sup>27</sup> *Id.*, at i.

<sup>28</sup> *Comments of Harris Corporation*, pg. 3. (filed Nov. 30, 2004).

<sup>29</sup> *Comments of National Academy of Sciences* (filed Sept. 1, 2004). *See also Comments of the National Radio Astronomy Observatory*, pg. 5 (filed Aug. 24, 2004) (advocating that the Commission also exclude the use of Channels 36 and 38).

<sup>30</sup> *Comments of The National Cable & Telecommunications Association*, pg. 2. (filed Nov. 30, 2004).

<sup>31</sup> *Id.*, at pg. 3.

<sup>32</sup> *Comments of Consumer Electronics Association*, pg. 2 (Nov. 30, 2004).

used in a reliable, non-interfering manner.<sup>33</sup> CEA also agreed with many other parties that the Commission must adopt adjacent channel protections to permit the DTV receivers to properly rejected unlicensed operations.<sup>34</sup>

Thus, it is clear from this review that many parties, not just incumbent television licensees, have raised substantial issues with respect to the rules proposed in the *NPRM*. Rather than just a few broadcasters calling “foul”, it is evident that a large cross-section of the telecommunications industry, from incumbents to equipment manufacturers (some that even market Part 15 devices), have significant and noteworthy doubts as to whether the proposed unlicensed operations would protect current, *licensed*, uses of the TV Band.

As discussed in more detail below, though, the Comments provided by the proponents of the Commission’s plan have failed to rebut these concerns, and, have thus failed to justify the risky proposals contained in the *NPRM*.

## DISCUSSION

### **A. Proponents Of Proposed Rules Fail To Demonstrate That The Unlicensed Devices Will Not Cause Interference To The Reception Of Television Signals.**

As noted above, many incumbent operators and those manufacturing the devices currently used in the TV Band provided evidence that the proposed operation of unlicensed devices in the TV Band would cause interference to the reception of television signals. On the other hand, the comments in support of the proposed rules do not provide any convincing evidence that that Commission’s proposals can be implemented in the near future.

In fact, most of the comments filed in support of the proposed rules indicate that some

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<sup>33</sup> *Id.*, at pg. 6.

<sup>34</sup> *Id.*, at pg. 9

sort of “sensing” mechanism would be the best choice for avoiding the creation of interference to existing users of the TV Band.<sup>35</sup> For example, Microsoft states that the adoption of rules that would require unlicensed devices to “sense” whether it could operate in the TV Band is the best option.<sup>36</sup>

However, other parties note that such devices have yet to be developed.<sup>37</sup> In fact, Motorola, one of the largest manufacturers of handheld wireless devices states that the adoption of standards for sensing devices “is a very difficult undertaking,” and that it “would be premature to rely on spectrum sensing until these mechanisms are shown to be reliable via comprehensive study and real-world testing.”<sup>38</sup> CEA concurs with this assessment, stating that:

the efficacy of spectrum sensing technology...[must]...be demonstrated and tested, before acceptance by the Commission, in an environment that includes the practical realities of electrical device noise, splatter from adjacent-channel DTV transmissions, omni-directional sensing antennas, the variability of building attenuation affecting the sensing device, and realistically high levels of multipath fading.<sup>39</sup>

In addition, IEEE 802 states that additional testing of sensing technology is necessary, such as focusing on the need to “more tightly control the frequency stability of the unlicensed devices to avoid measurement errors...and external impairments, like man-made noise in the low VHF frequency range, which may make the additional sensitivity ineffective in actual operation.”<sup>40</sup>

Similar doubts were cited regarding the Commission’s control signal proposal as well. CEA noted that the Commission did not provide specific standards for the control signal model,

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<sup>35</sup> See *Comments of Adaptrum, Inc.*, pg. 20 (filed Sept. 1, 2004). See also *Comments of CWLab*, pg. 3 (filed Nov. 30, 2004); *Comments of Tropos Networks*, pg. 5 (filed Nov. 30, 2004).

<sup>36</sup> *Comments of Microsoft Corporation*, pg. 13 (filed Nov. 30, 2004);

<sup>37</sup> See *Comments of Wireless Internet Service Providers Association*, pg. 8 (filed Nov. 24, 2004)(“WISPA”).

<sup>38</sup> *Comments of Motorola, Inc.*, pg. 7-8 (filed Nov. 30, 2004).

<sup>39</sup> *Comments of the Consumer Electronics Association*, pg. 6 (filed Nov. 30, 2004).

<sup>40</sup> *Comments of IEEE 802*, pg. 13 (filed Nov. 30, 2004).

stating that the Commission must develop “clearly defined” rules that “have more traceability.”<sup>41</sup> Also, IEEE 802 noted that one of the central underpinnings of the control signal model, that of having an accurate database, was unviable, and likely lack the “required accuracy and adaptability necessary to provide the required degree of protection from harmful interference to the incumbent licensees.”<sup>42</sup>

Thus, one of the largest manufacturers of portable wireless devices, and two of the leading industry trade groups representing the entities that would be developing and marketing these devices urge the Commission to conduct additional testing before the Commission adopts interference protection standards. In light of these substantial questions relating to the two proposals for portable unlicensed devices, the Commission must not move forward with the proposed implementation until it can be assured that the appropriate technology has been developed and properly tested in real-world circumstances.

While several parties propose that the Commission develop broad standards that would then permit the development of the technology, the above-referenced comments -- and simple common sense -- reveal that such an approach could lead to disastrous results for incumbent users of the TV Band. Since the TV Band has significantly different propagation characteristics than the 2.4 GHz or 5.9 GHz spectrum bands, the Commission can not merely look towards adopting similar broad standards for the TV Band. In fact, the superior propagation characteristics of the TV Band are precisely the characteristics that might well undermine the simple application of previously-developed technology.

Therefore, given the significant impact that these unlicensed devices will likely have on the incumbent users of the TV Band, and the critical issues raised by those parties that will be

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<sup>41</sup> *Comments of CEA*, pg. 7.

<sup>42</sup> *Comments of IEEE 802*, pg. 8.

leading the charge in developing the technology to implement the Commission's proposed rules, it would be highly imprudent for the Commission to simply adopt the general standards as proposed in the *NPRM*.

**B. Proponents Of Proposed Rules Advance Novel, But Legally Unsustainable, Arguments For Limiting Rights Of Licensed Stations And Other Incumbent Users Of The TV Band.**

Perhaps recognizing that the proposed use of unlicensed devices will, in fact, cause impermissible interference to incumbent users of the spectrum in the TV Band, several parties filed comments urging the Commission to eliminate current interference protections in order to pave the way for future unlicensed uses.

For example, the comments of the New American Foundation, *et. al.* ("NAF"), proposed to limit the interference protection requirements for broadcast licensees, and to give unlicensed operators co-equal status with Class A, LPTV, and TV Translators making the transition to digital service.<sup>43</sup> In its *ex parte* presentation filed on December 14, 2004, NAF called for the Commission to "reexamine its traditional rights among classes of licensees and Part 15 devices."<sup>44</sup> Moreover, NAF stated that "nothing prohibits the Commission from providing Part 15 devices co-equal status with more traditional station licenses."<sup>45</sup>

However, comments such as these reflect one of the main concerns that incumbent licensees have with respect to the Commission's proposals. Nowhere in the *NPRM* did the Commission state that it would simply tear up the rights afforded to existing licensees under the Communications Act of 1934.

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<sup>43</sup> See *Comments of New America Foundation, et. al.*, (filed Nov. 30, 2004).

<sup>44</sup> See *Ex Parte Presentation of New American Foundation, et. al.*, pg. 6 (filed Dec. 14, 2004).

<sup>45</sup> *Id.*, pg. 7.



NAF, though, ignores the central tenant of the Commission's licensing scheme – namely, the avoidance of harmful interference to existing licensees. The “Magna Carta” for NAF's proposals appears to be the one sentence contained in the 1989 Order that restructured the Part 15 rules.<sup>46</sup> Specifically, the Commission stated that the then-current television spectrum would not be affected by the proposed general emission limits advanced by the Commission in that proceeding. Based on this one statement, NAF has developed an alternate universe where the Commission would limit the interference protection rights of incumbent licensees to permit the roll-out of new unlicensed devices.

However, NAF has selectively misread the Part 15 Order to support its dubious agenda. Rather than justify the evisceration of the TV Band, the Part 15 Order recognized that the TV Band was undergoing tremendous change in light of then-nascent digital transition, and chose the only reasonable option – to hold off on permitting unlicensed devices in the TV band due to its foreseeable “more intensive use” during the digital transition.

In fact, the Commission cited its general concern of protecting against interference to authorized services several other times in the Part 15 Order.<sup>47</sup> Thus, rather than serving as an important first step in introducing unlicensed devices in to the TV Band, the Part 15 Order serves as important reminder that the Commission's first concern has been, and must continue to be, to guard against changes in its rules that would cause increased occurrences of interference to authorized services. While the technology has significantly matured since 1989, the same doubts that the Commission expressed in 1989 remain in 2004. In fact, the Commission has proposed a more intensive packing of the TV Band than was contemplated in 1989.

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<sup>46</sup> See *Comments of NAF*, pg. vi (citing *In re Revision of Part 15*, 4 FCC Rcd 3493, 3501 (1989) (“Part 15 Order”).

<sup>47</sup> *Part 15 Order*, ¶¶ 24, 28, and 32.

In addition, NAF argues that broadcasters should have less protection rights because they are permitted to operate on their channels for free.<sup>48</sup> This argument is, of course, totally without merit. First the argument ignores the interests of our viewers, and their legitimate and overriding expectation of interference-free reception. Second, very few current licensees of television stations were the recipient of the initial construction permit for their facilities. Instead, they obtained their license from other parties at significant cost. Even those that were the original construction permit recipient have invested large sums of money to develop and promote these facilities. All television broadcasters have expended millions of dollars to complete the transition to digital, and these costs can not be ignored. Moreover, since 1993, every broadcaster has been required to pay regulatory fees which contribute to the funding of 99% of expenses of the Federal Communications Commission.<sup>49</sup> In fact, over the past three years, Pappas has paid more than \$530,000 in regulatory fees, and television licensees in general have paid close to 35 million dollars in regulatory fees in the past two years.<sup>50</sup> Finally, to state the obvious, broadcasters provide an array of essential services to their viewers – from local news to PSA's to Amber Alerts. Clearly, broadcasters do not operate “for free”, and any attempt to undermine their interference protections based on this entirely specious and irrelevant argument must fail.

Additionally, NAF argues that existing secondary TV licensees and Class A licensees should not be afforded the chance to convert to digital technology on a paired channel. Instead, NAF argues that the Commission should not offer interference protection to converting television licensees, and instead afford interference protection rights to Part 15 devices

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<sup>48</sup> *NAF Ex Parte Presentation*, pg. 15.

<sup>49</sup> *See, e.g.*, <http://www.fcc.gov/fees/regfees.html> (last visited December 21, 2004).

<sup>50</sup> *Assessment and Collection of Regulatory Fees for Fiscal Year 2004*, Report & Order, Attachment C, 19 FCC Rcd 11662 (2004); *Assessment and Collection of Regulatory Fees for Fiscal Year 2003*, Report and Order, Attachment C, 18 FCC Rcd 15,985 (2003).

operating in the TV Band.<sup>51</sup>

This position is flawed on many accounts. First, the assignment of a second channel to secondary television licensees and Class A licensees is not a “new secondary service,” but rather a logical outgrowth of the Commission’s decision to delay the transition of these licensees until after the transition for full power stations was well underway. Moreover, while NAF apparently believes that it is on the side of the American public, its policies would severely undermine the reception to millions of the American public that rely upon the over-the-air delivery of their video programming via Class A, LPTV, and TV Translator licensees. Finally, since Class A licensees must meet many of the same rigorous standards as full-power television licensees, *see e.g.*, 47 C.F.R. § 73.6000 *et. seq.*, NAF’s restrictions of the right for these licensees to convert to digital use is especially egregious.

Therefore, while NAF’s submissions provide an interesting “alternate” universe for telecommunications policy development, they do not reflect the real-world considerations and statutory obligations imposed on the Commission to protect incumbent licensees from harmful interference. What they do accomplish is to underline the threat that the unlicensed operations pose without a confirmed interference protection plan in place. In the absence of convincing evidence that the proposed rules would not cause interference to existing licensees, NAF’s proposed re-write of the Communications Act must be rejected.

**C. Commission Must Protect “Usable” Signal Of All Currently-Authorized Licensees In The TV Band.**

Finally, even if the Commission does not eliminate the interference protection requirements included in the Commission’s rules, the Commission proposed, and several parties supported, the limitation of the broadcasters’ protected service area to that as determined by

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<sup>51</sup> *NAF Comments*, pg. 22.

the predicted service contours. However, as discussed above, any attempt to reduce the coverage of existing television licensees by limiting their protected service area must be rejected.

In the NPRM, the Commission proposes to limit interference protections for full-service television licensees to the Grade B service contour of their facilities, and the Grade A service contour for low power and Class A facilities.<sup>52</sup> The record demonstrates, though, that viewers and CATV systems utilize the over-the-air television signal far beyond these predicted service contours.

As such, rather than utilize a protection methodology implemented by the Commission for licensee-to-licensor protection analysis, the Commission must implement a protection requirement recognizing that the reception of the television signal must not be impaired. For example, the Commission adopted the use of OET Bulletin 72 in July 2002, which is a more accurate method for determining the signal strength of television signals beyond the predicted contours. Congress utilized this model when it adopted the Satellite Home Viewer Improvement Act of 1999 to more accurately measure the usable television signal.<sup>53</sup>

Moreover, the Commission must recognize that the U.S. public is at the tipping point in its acceptance of digital television. Recent reports show that the demand for DTV receivers is growing,<sup>54</sup> and soon television licensees will be required to build-out their maximized digital facilities.<sup>55</sup> Anything that will undermine the DTV transition, such as causing confusion as to the reception of the signal, or raising the specter of the unreliable nature of the digital service, must

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<sup>52</sup> See *NPRM*, at ¶ 30.

<sup>53</sup> *Satellite Home Viewer Improvement Act of 1999*, PL 106-113, 113 Stat. 1501, 1501A-526 to 1501A-545 (Nov. 29, 1999), codified in the Communications Act at 47 U.S.C. § 339(c)(3).

<sup>54</sup> *MultiChannel News*, Report Forecasts HDTV Purchases, pg. 24 (Nov. 29, 2004).

<sup>55</sup> DTV R&O, at ¶ 3.

be rejected.

This is especially true in the absence of must-carry rights for digital signals. Television licensees, and more importantly, the American viewers, are being forced to rely upon the over-the-air signal to spur the DTV transition. Special websites have been developed to assist viewers on the proper method to orient their receive antennas to obtain a useable digital signal.<sup>56</sup> In light of the substantial issues raised in the record in this proceeding as to the current state of the technology to protect incumbent licensees, the Commission must avoid any action that would cause confusion and would undermine the public's faith in the DTV transition.

## **CONCLUSION**

It is clear that the Commission has proposed an unnecessary, dangerous, and premature change in its licensing scheme at precisely the wrong point in time. Rather than dismissing the concerns of broadcasters, industry trade groups, and equipment manufactures as pure "foot dragging", the Commission should recognize the very real risks inherent in its proposal, and their potentially devastating consequences for viewers of over-the-air television service. The Commission and the proponents of these unlicensed devices have failed to meet their burden of providing a compelling justification for the opening of the TV Band to millions of mobile, unlicensed, and untraceable, devices during this critical period. The risks are simply too great for the Commission to rush ahead and take such a gamble at the expense of America's television viewers.

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<sup>56</sup> See *e.g.*, [www.dtv.gov](http://www.dtv.gov) (last visited December 21, 2004), <http://www.checkhd.com/default.aspx> (last visited December, 2004).

Therefore, Pappas Telecasting Companies urges the Commission to heed the warning of the parties raising serious concerns relating to the unlicensed devices proposal, and delay its consideration of this proposal until such time that the DTV transition has concluded.

Respectfully submitted,

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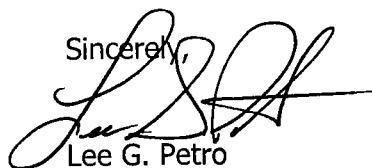
**RE: Reply Comments of Pappas Telecasting Companies  
ET Docket 04-186**

Dear Ms. Dortch:

On January 31, 2005, Pappas Telecasting Companies, by and through its counsel, filed Reply Comments in the above-referenced proceeding, as well as ET Docket 02-380. Due to a clerical error, the document electronically filed in ET Docket 04-186 was the incorrect version of the Reply Comments, while the Reply Comments electronically filed in ET Docket 02-380 was the correct version of the Reply Comments. To ensure that the record is complete, undersigned counsel is refiling the correct version of the Reply Comments in ET Docket 04-186.

Should there be any questions regarding this matter, please contact undersigned counsel.

Sincerely,



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